DOCUMENT RESUME

ED 302 878 EA 020 455

AUTHOR Gilman, David A.; Miller, Melinda
TITLE An Examination of Teachers Teaching Teachers. Staff Development Model in Southeast Dubois County.
INSTITUTION Indiana State Univ., Terre Haute. Professional School Services.
PUB DATE 8 Aug 88
NOTE 42p.; Prepared for the Southeast Dubois County School Corp., Ferdinand, Indiana. Printed on colored paper; some broken type in appendices. For related documents, see ED 299 681 and ED 299 710.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Elementary Secondary Education; *Inservice Education; *Peer Teaching; *Scores; *Staff Development; *Teacher Attitudes; Teacher Effectiveness
IDENTIFIERS *Attitude Inventory; *Southeast Dubois County School Corporation IN

ABSTRACT

This study investigated the effects of Teachers Teaching Teachers, a staff development project employing peer coaching methods, on public school educators' attitudes and beliefs. The 6-month project involved 13 teachers, administrators, and other school personnel in the Southeast Dubois County School Corporation (Ferdinand, Indiana). All participants were pretested and posttested on Likert Bipolar Attitude Inventories and Osgood's Semantic Differential Scales designed to measure desirable teacher characteristics. Similar measures were also administered to elementary and secondary students being taught by participating teachers. Results indicated that the mean scores for seven of the nine desired outcomes increased during the project. Significant differences were found for the teachers' perceptions of other persons, attitude toward administrators, and attitude toward differentiated staffing. Two pretest measures were higher than the posttest measures, but these differences were not significant. Significant differences favoring the posttest were found for the elementary and secondary students' perceptions of their teachers' effectiveness. Overall, the results support the effectiveness of Teachers Teaching Teachers as a technique for enhancing positive educator attitudes and beliefs. Included are 22 references and 2 appendices containing summary statistics and measuring instruments used in the study. (MLH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED302878

AN EXAMINATION OF TEACHERS TEACHING TEACHERS STAFF DEVELOPMENT MODEL IN SOUTHEAST DUBOIS COUNTY

Prepared for the

Southeast DuBois County School Corporation

Ferdinand, Indiana

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

by

David A. Gilman, Ph.D.

and

Melinda Miller

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

David A. Gilman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Professional School Services
1315 School of Education
Indiana State University
Terre Haute, IN 47809

August 8, 1988

EA 020 455

BEST COPY AVAILABLE

Abstract

This study investigated the impact of Teachers Teaching Teachers, a staff development project including peer coaching methods, on public school educators' attitudes and beliefs.

Thirteen teachers, administrators, and other school personnel took part in the project from November, 1987 to May, 1988. All participants were pretested and posttested on Likert Bipolar Attitude Inventories and Osgood's Semantic Differential Scales designed to measure desirable teacher characteristics. Pre and post measures were also administered to elementary and secondary students who were being taught by the teachers who participated in the project.

Results indicated that the mean scores for seven of the nine desired outcomes increased during the project. Significant differences were found for the Teachers' perceptions of other persons ($p < .01$), attitude toward administrators ($p < .05$) and attitude toward differentiated staffing ($p < .01$). Two pretest measures were higher than the posttest measures, but these differences were not significant.

Significant differences favoring the posttest were found for the elementary ($p < .001$) and secondary ($p < .02$) students perceptions of their teachers effectiveness.

Overall, the results support the effectiveness of Teachers Teaching Teachers as a technique for enhancing positive educator attitudes and beliefs.

Training activities for teachers through a local staff development program have become common practice in school districts (Baden, 1979). The heavy reliance upon teachers to deliver a quality educational program gives staff development or inservice education "both its importance and its urgency" (Harris, 1980, p. 13). As demands for educational reform have increased, new programs have been implemented that require new skills, knowledge and attitudes on the part of the current school staff (Brown & Scribner, 1982; Houston, 1987). These new programs further stress the need for an effective staff development program.

In 1985, Regan concluded that teacher training programs are "overwhelmingly inadequate" (p. 70). Roth (1980) feels that the education prospective teachers receive in a four-year degree program is designed to provide them with the essential but minimal qualifications for entering the profession.

Roth's results were confirmed by Regan who thinks that teachers are at best touched briefly by training and are then set adrift without the basic skills in human relations needed to have the greatest impact on student behavior and personal development, although teachers are the most vital factor in the educational system (Regan, 1985).

Since teachers, a vital factor in education, must base their decisions on knowledge and experience, Howey (1985) feels that a major purpose of inservice education programs is attending to the developing needs of each teacher.

An open, trusting school climate is a concern of many educators. Teachers are sometimes threatened by the staff development process. It is

the principal's responsibility to make sure all educators understand that the process is not designed to "fix" someone in the group but to fix the school's needs (Hall, 1985). Hall's results were confirmed by Purcell (1987) who concluded that adult learners believe they have control over the learning situation and are free from threat of failure. This concern must be attended to even before the project begins.

Teachers often declare concern about their professional renewal (Brown & Scribner, 1982) and have a need to continually strengthen their professional skills and knowledge (Roth, 1980). Staff development is thought to be a complex but necessary professional responsibility (Bishop, 1977; Center for Educational Research and Innovation, 1978).

One characteristic that makes staff development complex is the need for completeness. Celso and Morris (1985) believe that a staff development program can only be effective when it is a comprehensive, highly structured process of integrated events, rather than a series of disjointed workshops, lectures, or consultations.

By making inservice education programs an essential part of the school operation, the policies of accrediting associations on staff development have been strengthened. Therefore, school systems are encouraged to provide educators with the means, time, opportunity, and material for improving their professional competencies. (Downs, 1977; Dreeban, 1970).

The increasing sophistication of inservice training caused staff development efforts to grow both in success and number. Recognized exemplary programs include some aspect of a time-tested and recently reviewed staff development process, coaching (Cohn, 1987).

With the national movement toward differentiated school staffing, a variety of personnel can provide coaching as part of their contractual responsibilities (Showers, 1985). Yet the most successful coaching programs are done through peer endeavors, minimizing the power and status differentials (Showers, 1985). Supporting this same concept McFaul and Cooper (1983) state that "teachers feel peer feedback is generally more acceptable and accurate than that provided by administrators" (McFaul and Cooper, 1983). In the traditional model, principals, assistant principles, or department heads provided feedback to teachers on their classroom performance. For the most part, these evaluations were not viewed as an accurate indicator of teachers' effectiveness by the teachers themselves (Bishop, 1977; Lortis, 1975).

Cohn (1987) thinks that too often training events' warm and fleeting learning experiences result in little resultant skill building. He thinks follow-up coaching can overcome that malady and substantiates this belief by stating:

> Coaching offers specific benefits. Firstly it is an opportunity for teachers to share ideas and strategies, while honing their own observational skills. It results in an on-going refinement of the craft of teaching.
>
> Secondly, coaching develops a shared language, common knowledge base, and similar instructional expectations, hence, making communication and support simpler.
>
> Thirdly, coaching provides a link in a professional developmental cycle of inservice and actual implementation with observation.

It is also worthy to note that Cohn found in a five year study of course evaluations at Westminister College that those students who were coached in their utility in the workplace, experienced the greatest course satisfaction (Cohn, 1987).

On-site inservice is considered a component of a successful staff development program. A recent study of a three-year special written program (Bouley, 1986) indicated that the success was attributed to administrative support, a long term professional commitment, a design that allowed on-site inservice by on-site instructors, and, most importantly, incentive for teacher involvement (Bouley, 1986). "Principals can no longer rule by edict; they must involve the entire staff in setting and accomplishing the school's goals" (Hall, 1986). Without active administrative support a long-term commitment to allow the program to take root, any inservice is doomed (Bouley, 1986).

Involving the complete staff to make training optimally effective, the projects' content should result from a prior needs assessment; specific knowledge, performance and skill outcomes listed as criteria for training mastery; and immediate supervisors monitoring the trainee's performance with appropriate on-the-job feedback or coaching (Cohn, 1986).

Goldsberry and Harvey (1985) stated that a staff development program should directly contribute to teachers' performance of their craft and should also facilitate adult development of teachers as individuals. Teachers who benefit from an inservice activity are more likely to inspire their students with genuine enthusiasm for learning environments (Goldsberry & Harvey, 1985).

Thompson and Cooley (1984) support this idea by stating that a staff development program should focus on the problems of people throughout the organization and should consider the "psychological needs of the staff" (Thompson & Cooley, 1984, p. 4).

Bloom (1987) thinks that attending to teachers' personal needs throughout their careers is imperative if the teaching profession is to attract the most promising teacher candidates.

In 1985, Wood and Seyfarth measured teachers' attitudes toward mainstreaming handicapped children by administering semantic differential instruments over the course of a three-year training period. It was discovered that the longer the teacher was exposed to training, the more positive the attitude as compared to those teachers who have little or no training. It was also found that both affective and cognitive components of teacher training proved to be effective in changing teachers' attitudes. In 1973, Brodfield reported that staff development training produced no apparent changes in attitudes, but evidence was found that changes in teaching behavior and willingness of the teachers to apply what they had learned occurred (as cited in Wood & Seyfarth, 1985).

Some of the previous reported findings were used in the present study. In an attempt to incorporate a system of staff development training that is more realistic to the needs of public school professionals, the Teachers Teaching Teachers project, using the method of peer instruction was introduced to two Indiana public school systems. The expected outcome of the Teachers Teaching Teachers project is the enhancement of educators' attitudes and beliefs about the methods of staff development training, job duties, and themselves, colleagues, and students.

STATEMENT OF THE PROBLEM

GENERAL PROBLEM: What personal gains are possible through participation in the Teachers Teaching Teachers Development Model?

SPECIFIC PROBLEM: Do the evaluative results of the Teachers Teaching Teachers Staff Development training demonstratively enhance teacher attitudes and

beliefs? The Southeast Dubois County School Corporation?

HYPOTHESES:

1. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher in acceptance of others than they scored before the training.
2. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher in acceptance of self than they scored before the training.
3. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher on the total of (2) and (3) than they scored before the training.
4. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher in attitude toward teaching than they scored before the training.
5. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher in attitude toward peer coaching than they did before the training.
6. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher in attitude toward administration than they did before the training.
7. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher

in perception of student attitudes and self concept than they scored before the training.

8. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher in attitude toward other teachers than they scored before the training.
9. Teachers receiving the Teachers Teaching Teachers Staff Development training will score higher in attitude toward differentiated staffing than they scored before the training.
10. Elementary students will have a higher perception of their teachers who have completed the TTT program.
11. Secondary students will have a higher perception of their teachers who have completed the TTT program.

METHOD

Sample selection. The experimental group consisted of thirteen teachers, administrators and other school personnel from the Southeast DuBois School Corporation, Ferdinand, Indiana. This group comprised the subjects of the Teachers Teaching Teachers Development Model, a project in effect from November, 1987 through May, 1988.

Treatment. Teachers Teaching Teachers is a research-based staff development model in which a cadre of thirteen (13) teachers were chosen for the purpose of:

1. Receiving intensive training in fairly new teaching strategies proven to increase student achievement.

2. Acquiring the skills necessary to teach other teachers these strategies.

Administrative support for this program was essential. Administrators were asked to maintain an atmosphere conducive to professional growth. Administrators participated in the training sessions. They agreed to make the necessary accommodations for teacher interaction. It was established that while teachers were acquiring and implementing new skills, they would not be subjected to administrative evaluation.

Cadre selection was based upon demonstrated readiness for change, history of flexibility and adaptability, being able to cope with ambiguity, verbal skills, and willingness to take risks.

It was decided that the program would move gradually, emphasizing initially familiar strategies, before proceeding to more complex ones. Teachers exposed to the techniques were given feedback through peer observation during the learning stages leading to internalization. A one month period was provided between workshop sessions to allow for observation and feedback.

The strategies used for Teachers Teaching Teachers included: TESA, Taba's Inductive Reasoning Model, Bruner's Concept Attainment Model, Gordon's Synectics Model, Bruner's Critical Elements of Instruction (Madeline Hunter Model), and Marzano's Tactics for Thinking Model.

The training sessions also included the following:

1. Human development activities designed to build positive interpersonal relationships.
2. Presentation of research aimed toward understanding the model.
3. Providing information and demonstration manuals for every workshop.

4. Discussion of the application wherein teachers would discuss personal outcomes with peers, successes, or tribulations.
5. Practicing which often involved role playing.
6. Receiving feedback through peer observation in the classroom while attempting to implement the strategy.
7. Planning, scheduling observations, and testing the models.

Testing. The Likert Bipolar Attitude Inventory and the Osgood Semantic Differential were used for measurement of attitudes and beliefs. The Likert Scale consists of positive and negative statements with an item point value ranging from one to five. It was used on tests measuring Attitude Toward Teaching, Self Concept, and Acceptance of Others. Osgood's Semantic Differential is comprised of paired antonyms in which respondents reflect their beliefs to seven divisions between the antonyms. Each item has a score ranging from one to seven. The attitudes measured with this device were: Peer Coaching, Administration, Other Teachers, Perception of Student Attitudes and Self Concept, and Differentiated Staffing.

Likert Scales were also constructed to measure students' perception of their teachers' effectiveness for elementary students for secondary students. These measures were administered to random samples of elementary (grades K-4) and secondary (grades 5-12) students.

Analysis. Means scores, standard deviations, t-value, and one-tailed probability were determined by computer for both groups, by scoring and analyzing each test individually.

RESULTS

Table 1 indicates the mean and standard deviation for each area tested for both the pretest and the posttest. The table also shows the t-value and one tailed probability for each of the measures. Complete results of the testing and statistical analysis are contained in Appendix A of this report. Examples of each of the measures is contained in Appendix B of this report.

From Table 1, it can be seen that seven of the nine measures for teachers and both of the measures for students increased during the time between pre and post test measures. Results that were significant at or below the .05 level were:

Teachers

Perception of the Others ($p < .01$)

Attitude toward Administration ($p < .05$)

Attitude toward Differentiated Staffing ($p < .01$)

Students Perception of Teachers

Elementary Students (grades K-4) ($p < .001$)

Secondary Students (grades 5-12) ($p < .05$)

Small decreases between pre and post testing were noted in Attitudes Toward Other Teachers and Perception of Student Attitude and Conduct.

However, neither of these decreases were found to be significant at the .05 level.

Table 1. Summary Statistics for Teachers Teaching Teachers Project

	Pretest Mean	Posttest Mean	t-test value	Significance
STAFF (N=31)				
Self Concept	151.2	158.3	1.47	.07
Perception of Others	116.7	142.0	2.34	0.01
Total of Self and Others	254.6	262.7	1.37	0.09
Attitude Toward Teaching	102.6	105.6	1.29	0.10
Attitude Toward Peer Coaching	84.1	88.1	0.79	0.22
Attitude Toward Administration	72.2	86.2	1.69	0.05
Perception of Student Attitude and Self Concept	85.7	79.7	-1.37	0.09
Attitude Toward Other Teachers	87.5	80.9	-1.09	0.14
Attitude Toward Differentiated Staffing	59.2	69.8	2.21	0.01
STUDENTS				
Elementary Students (N=23) Perception of Teachers	39.1	43.5	3.30	0.001
Secondary Students (N=49) Perception of Teachers	110.7	122.2	1.95	0.02

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Teachers demonstrated gains in seven of nine areas in which they were tested. Students at both the elementary (K-4) and secondary (5-12) levels showed significant increases in their perceptions of their teachers' effectiveness.

The program, with modifications in the areas of evaluation and measurement, may provide additional substantial gains in areas not currently assessed.

The available research supports the program's length. In this case, the development model began November, 1987 and ran until May, 1988. Adult behavior patterns are difficult to change. The time period allowed sufficient time for the participants to adapt the newer methods and incorporate them into the classroom setting. Follow-up is extremely important. The program had a means of follow-up which proved to be effective.

Finally, since the teachers participating in the program were not subjected to administrative evaluation during that period, they had the opportunity to feel comfortable with the trial and error approach used in the program which enabled them to try new techniques not in their established teaching.

It should be noted that the posttest had a higher mean score than the pretest in every testing area except Teachers' Perception of Student Attitude and Self Concept and Attitude Toward Other Teachers.

The effectiveness of Teachers Teaching Teachers in enhancing positive educator attitudes and beliefs is demonstrated by the results of this study.

References

Baden, D. J. (1979). A user's guide to the evaluation of inservice education. Paper presented at the national workshop of National Council of States on Inservice Education, Hollywood, FL.

Bishop J. M. (1977). Organizational Influences on the Work Orientation of Elementary Teachers. Sociology of Work and Occupation. 4: 171 - 208.

Bloom, D. (1987). The Role of Higher Education in Fostering the Personal Development of Teachers. Paper presented at the World Assembly of the International Council on Education for Teaching. Eindhoven, Netherlands, 1987. (ERIC Document Reproduction Service No. ED 286 836)

Bouley S. (1986). Teachers teaching teachers: Model to improve writing instruction. NASSP Bulletin, 70 4: 102 - 104.

Brodfield, R. H. (1973). The special child in the regular classroom. A study of teacher inservice training and changing teacher attitudes toward handicapped children. Action in Teacher Education, 7 (3), 65 - 71.

Brown J. M., & Scribner, R. (1982). Special needs in-service training for vocational educators: How, when, and by whom? Journal of Vocational Edcuation Research, 7 (4), 15 - 28.

Celso N. & Morris, H. (1985). Systematic Management of Change Is the Key to Successful Staff Development. An Initial Study of the Bloomfield Public Schools Staff Development Project. Teacher Essentials, Styles & Strategies (TESS). Bloomfield Public School District, N.J. (ERIC Document Reproduction Service No. ED 288 244).

Cohn, Ronald B. (1987). A report presenting essentials to coaching success. Coaching for Staff Development.. (ERIC Document Reproduction Service No. SP 029 534).

Downs, F. (1977). Why have in-service education? In A. Osborne (ed.), An in-service handbook for mathematics education (p. 1 -11).

Dreeban, R. (1970). The nature of teaching: Schools and the work of teachers. Glenview, IL: Scott; Foresman

Goldsberry, L., & Harvey, P. L. (1985). Collaborative staff development in an elementary school. Journal of Staff Development, 6 (1), 37 - 45.

Hall, B. (1986). Leadership Support for Staff Development: A School Building Level Model. (ERIC Documented Reproduction Service No. ED 275 029).

Houston, W.R. (1987). Lessons for teacher education from corporate practice. Phi Delta Kappan, 68, 5: 388 - 392.

Howey, K.R. (1985). Six major functions of staff development: An Expanded imperative. Journal of Teacher Education, 36 (1), 58 - 64.

Lortis, D. C. (1975). Schoolteacher: A Sociological Study. Chicago: University of Chicago Press, 1975.

McFaul, S.A., Cooper, J.M. (1983). Peer Clinical Supervision in Urban Elementary School. Journal of Teacher Education, 34: 34 - 38.

Purcell, Larry O. (1987). Staff Development.. (ERIC Document Reproduction Service No. ED 286 258).

Regan, S.D. (1985). Human relations for educators through staff development. Journal of Humanistic Education and Development, 24 (2), 69 - 75.

Roth, R.A. (1980). Individualized staff development programs for competency development: A systematic approach. Lanham, MD: University Press of America.

Showers, B. (1985). Teachers coaching teachers. Educational Leadership, 47 (7), 43 - 48.

Thompson, J., & Cooley, V.E. (1984). Improvement in leadership, curriculum, staff development can lead to long-term gains. NASSP Bulletin, 68(476), 1-6.

Wood, J.W. & Seyfarth, J.T. (1985). A study of teacher inservice training and changing teacher attitudes toward handicapped children. Action in Teacher Education, 36 (1), 58 - 64.

Appendix A

Summary Statistics for Measures of the Study

Summary Statistics for Self Concept

THE 13 SCORES FOR GROUP 1:

114 167 136 157 161 152 164 153
139 137 164 155 167

THE 13 SCORES FOR GROUP 2:

159 165 168 157 152 157 150 160
155 169 152 146 168

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	151.23	158.31
STANDARD DEVIATION	15.65	7.44

T-VALUE	1.4721
ONE TAILED PROBABILITY	0.07
POINT-BISERIAL CORRELATION	0.2878

Summary Statistics for

Perception of Other Persons

THE 13 SCORES FOR GROUP 1:

96 115 118 135 107 122 131 123 115 99 114 124 118

THE 13 SCORES FOR GROUP 2:

134 128 123 136 137 131 135 119 118 108 223 225 129

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	116.69	142.00
STANDARD DEVIATION	11.23	37.34

T-VALUE	2.3402
ONE TAILED PROBABILITY	0.01
POINT-BISERIAL CORRELATION	0.4310

Summary Statistics for

Total of Self and Others

THE 13 SCORES FOR GROUP 1:

210 246 250 271 262 2
71 254 242
240 269 271 259 265

THE 13 SCORES FOR GROUP 2:

251 274 282 263 257 2
59 277 259
248 282 247 257 259

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	254.62	262.69
STANDARD DEVIATION	17.45	12.19

T-VALUE	1.3683
ONE TAILED PROBABILITY	0.09:
POINT-BISERIAL CORRELATION	0.2690

Summary Statistics for Attitude toward Teaching

THE 13 SCORES FOR GROUP 1:

	90	97	103	95	110	1
01	103	103				
	100	104	110	108	110	

THE 13 SCORES FOR GROUP 2:

	112	109	114	102	105	1
02	97	97				
	104	108	107	102	114	

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	102.62	105.62
STANDARD DEVIATION	6.14	5.71

T-VALUE	1.2897
ONE TAILED PROBABILITY	0.10
POINT-BISERIAL CORRELATION	0.2546

Summary Statistics for Attitude toward Peer Coaching

THE 13 SCORES FOR GROUP 1:

71 90 101 91 84 1
03 86 66
88 82 96 68 67

THE 13 SCORES FOR GROUP 2:

97 63 92 74 105 1
05 84 86
88 86 105 86 74

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	84.08	88.08
STANDARD DEVIATION	12.72	12.94

T-VALUE	0.7949
ONE TAILED PROBABILITY	0.22
POINT-BISERIAL CORRELATION	0.1602

Summary Statistics for Attitude toward Admistrati

THE 13 SCORES FOR GROUP 1:

70 92 73 85 36
80 97 96
95 87 15 38 75

THE 13 SCORES FOR GROUP 2:

102 91 90 92 105 1
05 90 79
91 66 65 77 68

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	72.23	86.23
STANDARD DEVIATION	26.30	14.11

T-VALUE	1.6910
ONE TAILED PROBABILITY	0.05
POINT-BISERIAL CORRELATION	0.3263

Summary Statistics for Teachers' Perception of Student Attitude and Self-Concept

THE 13 SCORES FOR GROUP 1:

84 93 65 94 75
90 84 82
97 90 89 84 87

THE 13 SCORES FOR GROUP 2:

97 86 91 87 60
74 80 80
87 80 90 48 76

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	85.69	79.69
STANDARD DEVIATION	8.49	13.29

T-VALUE	-1.3720
ONE TAILED PROBABILITY	0.09
POINT-BISERIAL CORRELATION	-0.2697

Summary Statistic for Attitude toward Other Teachers

THE 13 SCORES FOR GROUP 1:

100 91 94 90 88
89 98 85
88 87 30 96 92

THE 13 SCORES FOR GROUP 2:

90 78 79 96 105
75 75 82
92 76 82 67 55

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	87.54	80.92
STANDARD DEVIATION	17.76	12.87

T-VALUE	-1.0875
ONE TAILED PROBABILITY	0.14[illegible]
POINT-BISERIAL CORRELATION	-0.2167

Summary Statistics for Attitude toward Differentiated Staffing

THE 13 SCORES FOR GROUP 1:

56 52 62 66 50
55 73 65
66 67 47 55 55

THE 13 SCORES FOR GROUP 2:

101 56 64 91 60
86 65 79
47 68 60 71 59

ITEM	GROUP 1	GROUP 2
N	13	13
MEAN	59.15	69.77
STANDARD DEVIATION	7.82	15.41

T-VALUE	2.2147
ONE TAILED PROBABILITY	0.01
POINT-BISERIAL CORRELATION	0.4119

Summary Statistics for Elementary Students' Perception of the Effectiveness of Their Teachers

---

THE 15 SCORES FOR GROUP 1:

44 42 41 43 36
40 35 43
41 32 42 34 41
36 37

THE 15 SCORES FOR GROUP 2:

46 47 44 43 39
41 41 43
42 37 42 44 51
46 47

ITEM	GROUP 1	GROUP 2
N	15	15
MEAN	39.13	43.53
STANDARD DEVIATION	3.78	3.52

T-VALUE	3.2994
ONE TAILED PROBABILITY	0.001
POINT-BISERIAL CORRELATION	0.5291

Summary Statistics for Secondary Students' Perception of the Effectiveness of Their Teachers

---

THE 15 SCORES FOR GROUP 1:

110 130 117 115 100
98 65 110
123 120 116 111 106 1
17 123

THE 15 SCORES FOR GROUP 2:

130 119 151 127 145 1
08 119 120
83 123 132 129 106 1
34 107

ITEM	GROUP 1	GROUP 2
N	15	15
MEAN	110.73	122.20
STANDARD DEVIATION	15.29	16.84

T-VALUE	1.9519
ONE TAILED PROBABILITY	0.02
POINT-BISERIAL CORRELATION	0.3461

---

ppendix B

Measuring Instruments Used in the Study

NAME_____ SCHOOL_____ DATE_____

ACCEPTANCE OF SELF AND OTHERS

This is a study of some of your attitudes. Of course, there is nc answer for any statement. The best answer is what you feel is true of elf.

You are to respond to each question on the answer sheet accordinc he following scheme:

1	2	3	4	5
Not at all true of my-self	Slightly true of myself	About half-way true of myself	Mostly true of myself	True of myself

REMEMBER: the best answer is the one which applies to you.

1. I'd like it if I could find someone who would tell me how to solve personal problems.
2. I don't question my worth as a person, even if I think others do.
3. I can be comfortable with all varieties of people -- from the high t to the lowest.
4. I can become so absorbed in the work I'm doing that it doesn't bot me not to have any intimate friends.
5. I don't approve of spending time and energy in doing things for ot r people. I believe in looking to my family and myself more and let ng others shift for themselves.
6. When people say nice things about me, I find it difficult to belie they really mean it. I think maybe they're kidding me or just aren't b ng sincere.
7. If there is any criticism or anyone says anything about me, I just an't take it.
8. I don't say much at social affairs because I'm afraid that peopel ll criticize me or laugh if I say the wrong thing.
9. I realize that I'm not living very effectively but I just don't be eve that I've got it in me to use my energies in better ways.
10. I don't approve of doing favors for people. If you're too agreeabl they'll take advantage of you.
11. I look on most of the feelings and impulses I have toward people a being quite natural and acceptable.
12. Something inside me just won't let me be satisfied with any job I' done-- if it turns out well, I get a very smug feeling that this is benea me, I shouldn't be satisfied with this, this isn't a fair test.

1	2	3	4	5
Not at all true of myself	Slightly true of myself	About halfway true of myself	Mostly true of myself	True of myself

13. I feel different from other people. I'd like to have the feeling of security that comes from knowing I'm not too different from others.

14. I'm afraid for people that I like to find out what I'm really like, for fear they'd be disappointed in me.

15. I am frequently bothered by feelings of inferiority.

16. Because of other people, I haven't been able to achieve as much as I should have.

17. I am quite shy and self-conscious in social situations.

18. In order to get along and be liked, I tend to be what people expect me to be rather than anything else.

19. I usually ignore the feelings of others when I'm accomplishing some important end.

20. I seem to have a real inner strength in handling things. I'm on a pretty solid foundation and it makes me pretty sure of myself.

21. There's no sense in compromising. When people have values I don't like, I just don't care to have much to do with them.

22. The person you marry may not be perfect, but I believe in trying to get him (or her) to change along desirable lines.

23. I see no objection to stepping on other people's toes a little if it'll help get me what I want in life.

24. I feel self-conscious when I'm with people who have a superior position to mine in business or at school.

25. I try to get people to do what I want them to do, one way or another.

26. I often tell people what they should do when they're having trouble in making a decision.

27. I enjoy myself most when I'm along, away from other people.

28. I think I'm neurotic or something.

29. I feel neither above nor below the people I meet.

30. Sometimes people misunderstand me when I try to keep them from making mistakes that could have an important effect on their lives.

31. Very often I don't try to be friendly with people because I think they won't like me.

1	2	3	4	5
ot at rue of elf	Slightly true of myself	About half-way true of myself	Mostly true of myself	True of myself

32. here a very few times when I compliment people for their talents or obs th 've done.

33. enjoy ing little favors for people even if I don't know them well.

34. feel at I'm a person of worth, on an equal plane with others.

35. I can't void feeling guilty about the way I feel toward certain people in my l e.

36. I prefe to be alone rather than have close friendships with any of the people ound me.

37. I'm not fraid of meeting new people. I feel that I'm a worthwhile person and the 's no reason why they should dislike me.

38. I sort only half-believe in myself.

39. I seldo worry about other people.. I'm really pretty self-centered.

40. I'm very sensitive. People say things and I have a tendency to think they're critici ng me or insulting me in some way and later when I think of it, hey ma not have meant anything like that at all.

41. I think have certain abilities and other people say so too, but I wonder if I'm n t giving them an importance way beyond what they deserve.

42. I feel nfident that I can do something about the problems that may arise in the t ture.

43. I belie that people should get credit for their accomplishments, but I very sel om come across work that deserves praise.

44. When so ne asks for advice about some personal problem, I'm most likely to say, t's up to you to decide," rather than tell him what he should do.

45. I guess put on a show to impress people. I know I'm not the person I pretend o be.

46. I feel t at for the most part one has to fight his way through life. That means th t people who stand in the way will be hurt.

47. I can't elp feeling superior (or inferior) to most of the people I know.

48. I do not worry or condemn myself if other people pass judgment against me.

49. I don't esitate to urge people to live by the same high set of values which I ave for myself.

1	2	3	4	5
Not at all true of myself	Slightly true of myself	About halfway true of myself	Mostly true of myself	True of myself

50. I can be friendly with people who do things which I consider wrong.

51. I don't feel very normal, but I want to feel normal.

52. When I'm in a group I usually don't say much for fear of saying the wrong thing.

53. I have a tendency to sidestep my problems.

54. If people are weak and inefficient I'm inclined to take advantage of them. I believe you must be strong to achieve your goals.

55. I'm easily irritated by people who argue with me.

56. When I'm dealing with younger persons, I expect them to do what I tell them.

57. I don't see much point to doing things for others unless they can do you some good later on.

58. Even when people do think well of me, I feel sort of guilty because I know I must be fooling them--that if I were really to be myself, they wouldn't think well of me.

59. I feel that I'm on the same level as other people and that helps to establish good relations with them.

60. If someone I know is having difficulty in working things out for himself, I like to tell him what to do.

61. I feel that people are apt to react differently to me than they would normally react to other people.

62. I live too much by other people's standards.

63. When I have to address a group, I get self conscious and have difficulty saying things well.

64. If I didn't always have such hard luck I'd accomplish much more than I have.

* * *

ATTITUDE TOWARD TEACHING

Name_____ Date_____

DIRECTIONS: Following is a list of statements that someone might say about teaching. Of course, there is no right answer to any of them. The best answer is what you feel is true about your own belief.

You are to respond to each question on the answer sheet with the following scheme:

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

101. I am "crazy" about teaching.

102. The very existence of humanity depends on teaching.

103. Teaching is better than anything else.

104. I like teaching better than anything I can think of.

105. Teaching is profitable to everyone.

106. Teaching fascinates me.

107. Teaching has an irresistible attraction for me.

108. Teachers are liked by almost everyone.

109. I like teaching too well to ever give it up.

110. The merits of teaching as a career far outweight its defects.

111. Teaching makes for happier living.

112. Teaching is boring.

113. The job of teaching has limitations and defects.

114. I like many jobs better than teaching.

115. Teaching has several disadvantages.

116. Teaching has many undesirable features.

117. Teachers are disliked by many people.

118. I should not have to make my living by teaching when there are many better jobs.

119. Life would be happier without my having to teach.

120. Teaching is not endorsed by logical minded persons.

121. Teaching as a career would not benefit anyone with common sense.

122. Teaching accomplishes little for the individual or for society.

123. I hate teaching.

124. Teaching is bunk.

125. No sane person would be a teacher.

126. Nobody really likes to teach.

127. Words can't express my antagonism toward teaching.

128. Teaching is the worst thing I know.

129. Teaching is more of a plague than a profession.

130. Teaching is just about the worst career there is.

FACTORS OF TEACHING

NA _____ DATE _____

The purpose of this study is to measure the meanings of certain things to va ous people by having them judge them against a series of descriptive scales. In ta ng this test, please make your judgments on the basis of what these things mean to ou. On each page of this booklet you will find a different concept to be Ju ed and beneath it a set of scales. You are to rate the concept on each of these se es in order. Here is how you are to use these scales:

If you feel that the concept at the top of the page is very closely related to ne end of the scale, you should place your check-mark as follows:

fair __X__:___:___:___:___:___:_____ unfair

or

fair ___:___:___:___:___:___:__X__ unfair

If you feel that the concept is quite closely related to one or the other en of the scale (but not extremely), you should place your check-mark as follows:

strong ___:__X__:___:___:___:___:____ weak

or

strong ___:___:___:___:___:__X__:_____ weak

If the concept seems only slightly related to one side as opposed to the ot er side (but is not really neutral), then you should check as follows:

active ___:___:__X__:___:___:___:_____ passive

or

active ___:___:___:___:__X__:___:_____ passive

The direction toward which you check, of course, depends upon which of the tw ends of the scale seem most characteristic of the thing you're judging.

If you consider the concept to be neutral on the scale, both sides of the sc le equally associated with the concept, or if the scale is completely irrelevant, un elated to the concept, then you should place your check-mark in the middle space:

safe ___:___:___:__X__:___:___:____ dangerous

IM ORTANT: (1) Place your check-marks in the middle of the spaces, not on the boundaries:

THIS NOT THIS

___:___:___:___:__X__:___X___

(2) Be sure you check every scale for every concept - do not omit any.

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you've had the same item before on the te t. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make ea h item a separate and independent judgment. Work at fairly high speed through th s test. Do not worry or puzzle over individual items. It is your first impressions, th immediate "feelings" about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.

COACHING

timely	___	___	___	___	___	___	___	untimely
strong	___	___	___	___	___	___	___	weak
good	___	___	___	___	___	___	___	poor
optimistic	___	___	___	___	___	___	___	pessimistic
warm	___	___	___	___	___	___	___	cold
sharp	___	___	___	___	___	___	___	dull
effective	___	___	___	___	___	___	___	ineffective
clear	___	___	___	___	___	___	___	confusing
valuable	___	___	___	___	___	___	___	worthless
essential	___	___	___	___	___	___	___	unimportant
active	___	___	___	___	___	___	___	passive
kind	___	___	___	___	___	___	___	cruel
liked	___	___	___	___	___	___	___	hated
sharp	___	___	___	___	___	___	___	dull
bright	___	___	___	___	___	___	___	dark

ADMINISTRATION

timely ____ ____ ____ ____ ____ ____ ____ untimely

strong ____ ____ ____ ____ ____ ____ ____ weak

good ____ ____ ____ ____ ____ ____ ____ poor

optimistic ____ ____ ____ ____ ____ ____ ____ pessimistic

warm ____ ____ ____ ____ ____ ____ ____ cold

sharp ____ ____ ____ ____ ____ ____ ____ dull

effective ____ ____ ____ ____ ____ ____ ____ ineffective

clear ____ ____ ____ ____ ____ ____ ____ confusing

valuable ____ ____ ____ ____ ____ ____ ____ worthless

essential ____ ____ ____ ____ ____ ____ ____ unimportant

active ____ ____ ____ ____ ____ ____ ____ passive

kind ____ ____ ____ ____ ____ ____ ____ cruel

liked ____ ____ ____ ____ ____ ____ ____ hated

sharp ____ ____ ____ ____ ____ ____ ____ dull

bright ____ ____ ____ ____ ____ ____ ____ dark

STUDENTS' ATTITUDE AND SELF-CONCEPT

timely	____	____	____	____	____	____	____	untimely
strong	____	____	____	____	____	____	____	weak
good	____	____	____	____	____	____	____	poor
optimistic	____	____	____	____	____	____	____	pessimistic
warm	____	____	____	____	____	____	____	cold
sharp	____	____	____	____	____	____	____	dull
effective	____	____	____	____	____	____	____	ineffective
clear	____	____	____	____	____	____	____	confusing
valuable	____	____	____	____	____	____	____	worthless
essential	____	____	____	____	____	____	____	unimportar
active	____	____	____	____	____	____	____	passive
kind	____	____	____	____	____	____	____	cruel
liked	____	____	____	____	____	____	____	hated
sharp	____	____	____	____	____	____	____	dull
bright	____	____	____	____	____	____	____	dark

OTHER TEACHERS

timely	____	____	____	____	____	____	____ untimely
strong	____	____	____	____	____	____	____ weak
good	____	____	____	____	____	____	____ poor
optimistic	____	____	____	____	____	____	____ pessimistic
warm	____	____	____	____	____	____	____ cold
sharp	____	____	____	____	____	____	____ dull
effective	____	____	____	____	____	____	____ ineffective
clear	____	____	____	____	____	____	____ confusing
valuable	____	____	____	____	____	____	____ worthless
essential	____	____	____	____	____	____	____ unimportant
active	____	____	____	____	____	____	____ passive
kind	____	____	____	____	____	____	____ cruel
liked	____	____	____	____	____	____	____ hated
sharp	____	____	____	____	____	____	____ dull
bright	____	____	____	____	____	____	____ dark

DIFFERENTIATED STAFFING

(Teachers who possess different proficiencies will do different kinds of jobs and be compensated accordingly.)

timely	____	____	____	____	____	____	____	untimely
strong	____	____	____	____	____	____	____	weak
good	____	____	____	____	____	____	____	poor
optimistic	____	____	____	____	____	____	____	pessimistic
warm	____	____	____	____	____	____	____	cold
sharp	____	____	____	____	____	____	____	dull
effective	____	____	____	____	____	____	____	ineffective
clear	____	____	____	____	____	____	____	confusing
valuable	____	____	____	____	____	____	____	worthless
essential	____	____	____	____	____	____	____	unimportant
active	____	____	____	____	____	____	____	passive
kind	____	____	____	____	____	____	____	cruel
liked	____	____	____	____	____	____	____	hated
sharp	____	____	____	____	____	____	____	dull
bright	____	____	____	____	____	____	____	dark